IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicants:	Deeds *et al.*		
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Art Unit:	2617		
Examiner:	A. Balaoing		
Title:	TERMINAL, SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR DISPLAYING AN INDICATION OF BANDWIDTH		

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APPEAL BRIEF UNDER 37 CFR §41.37

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" filed June 30, 2006.

1. ***Real Party in Interest.***

The real party in interest in this appeal is Nokia Corporation, the assignee of the above-referenced patent application.

2. ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3. ***Status of Claims.***

Claims 1, 3, 5-12, 17-21, 23, 25-32, 37-41, 43, and 45-52 are pending in the application and all claims stand rejected as unpatentable over a combination of prior art references as set forth in greater detail below. Claims 2, 4, 13-16, 22, 24, 33-36, 42, 44 and 53-56 were previously cancelled. The prior art rejection of all pending claims is appealed herein.

4. ***Status of Amendments.***

All claim amendments presented during prosecution were entered and are set forth in the clean copy of the pending claims appended to the brief. Claims 1, 8, 12, 21, 28, 29, 32, 41, 43, 48-50 and 52 have been amended once during prosecution.

5. ***Summary of Claimed Subject Matter.***

The present application discloses a terminal adapted to communicate via a communications system with a detectable available bandwidth. The terminal includes a transmitter and a receiver for transmitting and receiving a plurality of different communications signals, respectively. Also, the terminal includes a display and a controller that drives the display. The controller is capable of detecting: both available and required bandwidth levels; both the bandwidth for signal transmission and signal reception; and the type of communication signals being transmitted and received by the terminal. The controller is further capable of controlling the operation of the display in response to the detected elements. As such, the display can inform the user of the terminal of the available and required bandwidth levels for transmitting and receiving a given type of communication signal. See, for example, the Abstract, at page 34 of the Specification).

Independent Claim 1 recites a terminal, as shown in Figure 2, comprising a transmitter (70) and a receiver (72) for transmitting and receiving signals, respectively, via at least one communications system. See the Specification, at page 10, lines 3-5. The recited terminal further comprises a display (82) capable of visually representing (see, for example, Figures 9-20) an available bandwidth of a current communications system and a required bandwidth for transmitting and receiving signals on the current communications system. See the Specification, at page 13, lines 5-18. The recited terminal of Claim 1 also comprises a controller (74) capable of determining the available bandwidth of the current communications system, determining the required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith, and altering the appearance of the display based on a determination of the available bandwidth and the required bandwidth. See the Specification, at page 12, lines 16-28.

Independent Claims 21 and 41 recite a method and computer program product, respectively, for visually quantifying bandwidth on a terminal adapted to communicate via at least one communications system. Figure 4 shows one schematic example of the recited steps of Claims 21 and 41, which may comprise: transmitting and receiving signals on at least one communications system; determining an available bandwidth of a current communications system (110); determining a required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith (130); and controlling a display of the terminal to visually represent the available bandwidth (see step (120)) of the current communications system and the required bandwidth (see step (140)) for transmitting and receiving signals on the current communications system. See the Specification, at page 14, lines 13-29.

Independent Claim 17 recites a system comprising a first terminal comprising a transmitter and a receiver for transmitting and receiving signals, respectively, via at least one communications system. The recited system of Claim 17 further comprises a controller (74) capable of determining the available bandwidth of the communications system utilized by the first terminal. Claim 17 also recites a second terminal (see generally, Figure 1, showing multiple terminals in communication with the communications system), responsive to the controller, comprising a display (82) capable of visually representing an available bandwidth of the communications system utilized by the first terminal. See the Specification, at page 20, line 26 through page 21, line.16.

Independent Claim 37 recites a method comprising steps for transmitting and receiving signals with a first terminal on at least one communications system and determining an available bandwidth of the communications system utilized by the first terminal. The method recited by Claim 37 further comprises controlling a display (82) of a second terminal to visually represent the available bandwidth of the communications system utilized by the first terminal. See generally Figure 1, and page 20, line 26 through page 21, line 16 of the Specification.

6. ***Grounds of Rejection to be Reviewed on Appeal.***

Claims 1, 6-9, 21, 26-29, 41, and 46-49 (including independent Claims 1, 21, and 41) were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Application No. 2003/0169460 to Liao *et. al.* ("Liao"). In the Final Office Action, the Examiner admits that "Liao does not specifically disclose wherein the display is further capable of visually representing the required bandwidth for transmitting and receiving signals on the current communications system." However, the Examiner alleges that: "it would have been obvious to a person skilled in the art at the time the invention was made to modify Liao to display the bandwidth determined necessary to transmit and receive signals, as Liao teaches calculating the bandwidth needed to transmit and receive to and from a communication system."

The remaining pending claims depending from one of independent Claims 1, 21 and 41 were also rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of several other references as listed below. Claims 3, 11, 23, 31, 43 and 51 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of U.S. Patent Application No. 2004/0048624 to Ko ("Ko"). Claims 5, 25, and 45 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of U.S. Patent No. 6,501,770 to Arsenault *et al.*("Arsenault"). Claims 10, 30, and 50 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of U.S. Patent Application No. 2004/0071081 to Rosenfled ("Rosenfled"). Claims 15, 35, and 55 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Ko and further in view of Rosenfled. Claims 12, 32, and 52 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Ko and further in view of U.S. Patent No. 5,630,159 to Zancho ("Zancho"). Claims 16, 36, and 56 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Ko and further in view of Rosenfeld and further in view of Zancho.

Claims 17, 18, 37, and 38 (including independent Claims 17 and 37) were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of U.S. Patent No. 6,233,469 to Watanabe ("Watanabe"). In response to the Applicants' previous traverse of these rejections, the Examiner stated that "both [Liao and Watanabe] disclose displaying data to users on a portable communications device, therefore it would have been obvious to a person of ordinary skill in the

art to modify Liao to include the teachings of Watanabe, as it would provide a user with a better view of the display during calls."

The remaining pending claims depending from one of independent Claims 17 and 37 were also rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Watanabe and in further view of other references as listed below. Claims 19 and 39 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Ko and further in view of Watanabe. Claims 20 and 40 were rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of Arsenault and further in view of Watanabe.

7. ***Argument.***

I. Independent Claims 1, 21, and 41 (and claims depending therefrom)

A. The Examiner has failed to consider the references as a whole, as required by MPEP 2141.02(VI), when considering what a skilled artisan would take therefrom.

Independent Claims 1, 21, and 41 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Application No. 2003/0169460 to Liao *et. al.* ("Liao"). The Office Action indicates that it would be obvious to use the disclosure of Liao as motivation to visually represent the required bandwidth for transmitting and receiving signals on the current communications system in addition to the available bandwidth of the current communications system. The Office Action admits that Liao does not specifically disclose a display capable of visually representing the required bandwidth for transmitting and receiving signals on a communications system. However, the Office Action further states that: it would have been obvious … to modify Liao to display the bandwidth determined necessary to transmit and receive signals, as Liao teaches calculating the bandwidth needed to transmit and receive via a communications system." Applicants respectfully submit that, in alleging obviousness, the Examiner is merely picking and choosing portions of Liao without properly considering what the reference teaches as a whole.

When viewed as a whole, Liao teaches away from the display of the required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith. Specifically, there is no reason for the system disclosed in Liao to display the required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith, because Liao discloses that the system performs an algorithm to allocate bandwidth among competing applications and may "automatically select for [bandwidth] upgrade the application that is most active in bandwidth usage." *See* Liao at paragraph 0054. Thus, Liao teaches away from displaying the required bandwidth (relative to the available bandwidth, for example) since the required bandwidth determination is disclosed in Liao as an intermediate step that leads to the "automatic" allocation of bandwidth among competing applications.

Accordingly, Applicants respectfully submit it is improper for the Examiner to rely on the disclosure of the determination of a required bandwidth while ignoring the specific and unambiguous teachings of Liao to use the bandwidth determination as an intermediate step that leads not to a display of the required bandwidth, but to an "automatic" allocation of bandwidth among competing applications. The specific display capable of visually representing a required bandwidth is a clearly recited element of the presently claimed invention, and Applicants respectfully submit the Examiner has failed to consider the entirety of the teachings of Liao as they pertain to the preferred use of the determined bandwidth to automatically allocate bandwidth among competing applications without displaying an indication of the determined bandwidth to a user.

Similar arguments can also be made for the remaining references used to reject Claims 3, 5, 10-12, 15, 16, 23, 25, 30- 32, 35, 36, 43, 45, 50- 52, 55 and 56, which each depend from, and include all of the limitations of at least one of Claims 1, 21, and 41. None of the cited Ko, Arsenault, Rosenfled, Zancho or Watanabe references teaches or suggests a display capable of visually representing a required bandwidth. Thus none of the cited references serve to contradict the teachings of Liao as a whole which indicate that the determination of required bandwidth as an intermediate step that leads not to a display of the required bandwidth, but to an "automatic" allocation of bandwidth among competing applications.

B. The Examiner has failed to show suggestion in the cited references, as required by MPEP 2143.01(I), for modifying the references to arrive at the presently claimed invention.

The Office Action admits that "Liao does not specifically disclose wherein the display is further capable of visually representing the required bandwidth for transmitting and receiving signals on the current communications system." However, the Office Action alleges that motivation to modify Liao may be inferred as follows: "This is beneficial in that manual adjustment of bandwidth usage can be determined by the visual display." However, as discussed herein, Liao specifically teaches away from manual adjustment of bandwidth usage. Liao discloses that "the cellular phone may automatically select for upgrade the application that is most active in bandwidth usage." In other embodiments, Liao discloses that "a suitable screen may pop up listing the currently running applications and prompting the user to select one of the applications for a bandwidth upgrade." *See* Liao, at paragraph 0054. In both of these disclosed embodiments, however, Liao includes no objective teaching for displaying the required bandwidth for transmitting and receiving signals, and instead repeatedly discloses various concepts for selecting an "application" (either "automatically" or via a user selection of such an application) for an allocation of additional bandwidth and updating a display to indicate the additional bandwidth made available by such an allocation. *See* Liao, at paragraph 0055. Thus, Liao teaches away from the asserted "beneficial" aspects of the proposed modification to Liao that results in the pending rejections of independent Claims 1, 21, and 41. Furthermore, Liao contains no objective teaching or suggestion to display the "required bandwidth" for transmitting and receiving signals via a current communications system.

Thus, the Applicants respectfully submit that the Examiner has failed to show suggestion in the cited references, as required by MPEP 2143.01(I), for modifying the references to arrive at the presently claimed invention. Furthermore, for at least the reasons stated above, the Applicants respectfully submit that neither: (1) the nature of the problem to be solved; nor (2) the knowledge of persons of ordinary skill in the art, provide the requisite suggestion or motivation to modify the references cited herein to arrive at the presently claimed invention.

C. The Examiner is relying upon impermissible hindsight in modifying the references to arrive at the presently claimed invention.

Applicants further respectfully submit that the rejections of Claims 1, 21, and 41 are the result of the improper use of hindsight to modify Liao in light of the disclosure of the present application. As already pointed out, the Examiner has failed to consider the teaching of the references as a whole, and has failed to show proper suggestion for modifying the cited references. Accordingly, it seems apparent that the Examiner is relying upon impermissible hindsight to modify the references and arrive at the presently claimed invention.

D. The additional references combined with Liao do not overcome the deficiencies of the pending rejections as discussed herein.

Each of the cited Watanabe, Ko, Arsenault, Rosenfled, and Zancho references also fail to teach or suggest the determination and display of the required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith as recited by independent Claims 1, 21 and 41 such that any combination of Liao with any one or more of the cited Watanabe, Ko, Arsenault, Rosenfled, and Zancho references likewise fails to teach or suggest independent Claims 1, 21 and 41, as well as the claims that depend therefrom.

For each of the foregoing reasons, it is submitted that the rejections of independent Claims 1, 21 and 41, as well as the claims that depend therefrom, are therefore overcome.

II. Independent Claims 17 and 37 (and claims depending therefrom)

A. The Examiner has failed to consider the references as a whole, as required by MPEP 2141.02(VI), when considering what a skilled artisan would take therefrom.

Claims 17 and 37 (and Claims 18 and 38, depending respectively therefrom) stand rejected under 35 U.S.C. §103(a) as being obvious over Liao in view of U.S. Patent No. 6,233,469 to Watanabe ("Watanabe"). Each of Claims 17 and 37 specifically recite a second

terminal comprising a display capable of visually representing an available bandwidth of a communications system utilized by a first terminal. The Office Action states that "both [Liao and Watanabe] disclose displaying data to users on a portable communications device, therefore it would have been obvious to a person of ordinary skill in the art to modify Liao to include the teachings of Watanabe, as it would provide a user with a better view of the display during calls."

However, as discussed herein, the Examiner has once again failed to consider the teachings of the references as a whole. For example, the fact that the apparatus disclosed in Watanabe provides a user with a better view of the display (via a sliding display) during calls does not suggest the desirability of the combination of Watanabe's teachings with that of Liao, as Liao teaches that "the cellular phone may automatically select for upgrade the application that is most active in bandwidth usage." *See* Liao, at paragraph 0054. Watanabe contains no suggestion of the desirability of tracking bandwidth at all (as it is concerned only with the visibility of the display while the terminal is in use), and Liao, when viewed as a whole, suggests that bandwidth tracking should result in the automatic selection of an application that is most active in bandwidth usage for a bandwidth reallocation (thereby negating the need to view a bandwidth display, as such bandwidth tracking and reallocation may be transparent to a user). Thus, for at least the reasons stated above, the Applicants respectfully submit that the Examiner has failed to consider the references as a whole, when considering what a skilled artisan would take therefrom.

B. The Examiner has failed to show suggestion in the cited references, as required by MPEP 2143.01(I), for modifying the references to arrive at the presently claimed invention.

The only alleged "objective teaching" presented in the Office Action to combine the teachings of Liao and Watanabe is that the proposed combination "would provide a user with a better view of the display during calls." As discussed herein, the fact that the apparatus disclosed in Watanabe provides a user with a better view of the display during calls does not suggest the combination of Watanabe's teachings with that of Liao, as Liao teaches that "the cellular phone may automatically select for upgrade the application that is most active in bandwidth usage." *See* Liao, at paragraph 0054. Watanabe contains no suggestion of the desirability of tracking

bandwidth at all, and Liao suggests that bandwidth tracking should result in the automatic selection of an application that is most active in bandwidth usage (thereby negating the need to view a display at all). Therefore, for at least the reasons stated above, the Applicant's respectfully submit that the Examiner has failed to show suggestion in the references for modifying the references to arrive at the invention specifically recited in Claims 17 and 37.

Furthermore, the Applicants respectfully submit that neither: (1) the nature of the problem to be solved; nor (2) the knowledge of persons of ordinary skill in the art, provide the requisite suggestion or motivation to combine the Liao and Watanabe references cited herein to arrive at the recited invention of Claims 17 and 37. For example, as described herein, Watanabe contains no suggestion of the desirability of tracking bandwidth at all. The problem solved by Watanabe (as admitted by the Examiner) is the provision of a better view of the display during calls. Furthermore, Liao suggests that bandwidth tracking should result in the automatic selection of an application that is most active in bandwidth usage (thereby negating the need to view a secondary display).

C. The Examiner is relying upon impermissible hindsight in modifying the references to arrive at the presently claimed invention.

Applicants further respectfully submit that the rejections of Claims 17 and 37 are the result of the improper use of hindsight to combine Liao and Watanabe in light of the disclosure of the present application. The only "objective teaching" alleged by the Examiner to modify Liao to include the slidable display of Watanabe presented in the Office Action is that the proposed combination "would provide a user with a better view of the display during calls." This advantage is only suggestive of the proposed combination of the cited references when viewed in light of the disclosure of the present application. Such a "suggestion" requires the use of improper hindsight. As already pointed out, the Examiner has failed to consider the teaching of the references as a whole, and has failed to show proper suggestion for modifying and/or combining the cited references. Accordingly, it seems apparent that the Examiner is relying upon impermissible hindsight to modify the references and arrive at the presently claimed invention.

D. The additional Ko and Arsenault references, combined with Liao and Watanabe, do not overcome the deficiencies of the pending rejections as discussed herein.

Because the proposed combination of Liao and Watanabe is improper as discussed herein, any combination of Liao, Ko, Arsenault and Watanabe to reject Claims 19, 20, 38 or 39 (depending respectively from independent Claims 17 and 37) is likewise improper as neither Liao nor Watanabe teach or suggest the combination of their individual teachings. Moreover, not only do Liao and Watanabe each fail to teach or suggest a second terminal comprising a display capable of visually representing an available bandwidth of a communications system utilized by a first terminal, but Ko and Arsenault also fail to teach or suggest that a second terminal includes a display that is capable of visually representing an available bandwidth of a communications system utilized by a first terminal. As such, any combination of Liao, Watanabe, Ko, and Arsenault also fails to teach or suggest independent Claims 17 and 37, as well as the claims that depend therefrom.

For each of the foregoing reasons it is submitted that the rejections of independent Claims 17 and 37, and the claims depending therefrom, are therefore overcome.

8. ***Claims Appendix.***

The Claims Appendix, attached hereto, includes a clean copy of pending Claims 1, 3, 5-12, 17-21, 23, 25-32, 37-41, 43, and 45-52.

9. ***Evidence Appendix.***

No evidence has been submitted to the Examiner or relied upon by the Applicant.

10. ***Related Proceedings Appendix.***

There are no decisions by a court or the Board in related proceedings.

CONCLUSION

In summary, Liao, Watanabe, Ko, Rosenfled, Arsenault, and Zancho, alone or in combination, do not teach, suggest, or provide motivation for the embodiments of the present invention, as claimed in Claims 1, 17, 21, 37, and 41, and the claims depending therefrom. Furthermore, none of the cited references contain a specific teaching, motivation or suggestion to combine their individual teachings. Accordingly, it is submitted that the present invention, as defined by the pending claims, is patentable over the references cited by the Examiner in the Final Office Action mailed February 3, 2006. Accordingly, a decision from the Board of Patent Appeals and Interferences reversing the final rejection of the pending claims is earnestly solicited.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) A terminal adapted to communicate via at least one communications system, wherein the terminal comprises:

a transmitter and a receiver for transmitting and receiving signals, respectively, via the at least one communications system;

a display capable of visually representing an available bandwidth of a current communications system and a required bandwidth for transmitting and receiving signals on the current communications system; and

a controller capable of determining the available bandwidth of the current communications system, determining the required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith, and altering the appearance of the display based on a determination of the available bandwidth and the required bandwidth.

2. (Cancelled)

3. (Original) A terminal according to Claim 1, adapted to communicate via a plurality of different communications systems, wherein the controller is further capable of determining the current communications system on which the terminal is transmitting and receiving signals, and wherein the display is further capable of visually representing the current communications system on which the terminal is transmitting and receiving signals.

4. (Cancelled)

5. (Original) A terminal according to Claim 1, wherein the controller is capable of separately determining the bandwidth available for signal transmission and the bandwidth available for signal reception, and wherein the controller is further capable of directing the display to separately visually represent the respective bandwidths available for signal transmission and signal reception.

6. (Original) A terminal according to Claim 1, wherein the controller is further capable of directing the display to visually represent the available bandwidth using a first icon corresponding to the available bandwidth.

7. (Original) A terminal according to Claim 1, wherein the controller is further capable of directing the display to visually represent the available bandwidth using a first color corresponding to the available bandwidth.

8. (Previously Presented) A terminal according to Claim 1, wherein the controller is further capable of directing the display to visually represent the available bandwidth using a first icon corresponding to the available bandwidth and wherein the controller is further capable of directing the display to visually represent the required bandwidth using a second icon corresponding to the required bandwidth.

9. (Original) A terminal according to Claim 8, wherein the controller is further capable of directing the display to visually represent the first icon in comparative relation to the second icon such that the controller is further capable of directing the display to visually represent the available bandwidth in relation to the required bandwidth, respectively.

10. (Original) A terminal according to Claim 9, wherein the controller is further capable of directing the display to visually represent the second icon in a second color used to indicate a value of a ratio of the required bandwidth to the available bandwidth.

11. (Original) A terminal according to Claim 3, wherein the controller is further capable of directing the display to visually represent the available bandwidth using a first icon corresponding to the available bandwidth.

12. (Previously Presented) A terminal according to Claim 11, wherein the controller is further capable of directing the display to visually represent the first icon in a predefined color used to indicate the type of the current communications system on which the terminal is transmitting and receiving signals.

Claims 13-16. (Cancelled)

17. (Original) A system comprising:

a first terminal comprising a transmitter and a receiver for transmitting and receiving signals, respectively, via the at least one communications system;

a controller capable of determining the available bandwidth of the communications system utilized by said first terminal; and

a second terminal, responsive to said controller, comprising a display capable of visually representing an available bandwidth of the communications system utilized by said first terminal.

18. (Original) A system according to Claim 17, wherein the controller is further capable of determining a required bandwidth for transmitting and receiving signals on the communications system utilized by said first terminal, and wherein the display of said second terminal is further capable of visually representing the required bandwidth for transmitting and receiving signals on the communications system utilized by said first terminal.

19. (Original) A system according to Claim 17, wherein said first terminal is adapted to communicate via a plurality of different communications systems, wherein the controller is further capable of determining the current communications system on which said first terminal is transmitting and receiving signals, and wherein the display of said second terminal is further capable of visually representing the current communications system on which said first terminal is transmitting and receiving signals.

20. (Original) A system according to Claim 17, wherein said controller is capable of separately determining the bandwidth available for signal transmission by said first terminal and the bandwidth available for signal reception by said first terminal, and wherein the display of said second terminal is capable of separately visually representing the respective bandwidths available to said first terminal for signal transmission and signal reception.

21. (Previously Presented) A method of visually quantifying bandwidth on a terminal adapted to communicate via at least one communications system, said method comprising:

transmitting and receiving signals on at least one communications system;

determining an available bandwidth of a current communications system;

determining a required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith; and

controlling a display of the terminal to visually represent the available bandwidth of the current communications system and the required bandwidth for transmitting and receiving signals on the current communications system.

22. (Cancelled)

23. (Original) A method according to Claim 21, further comprising:

determining a type of the current communications system on which the terminal is transmitting and receiving signals; and

controlling the display of the terminal to visually represent the type of the current communications system on which the terminal is transmitting and receiving signals.

24. (Cancelled)

25. (Original) A method according to Claim 21, wherein determining the available bandwidth comprises separately determining the bandwidth available for signal transmission and the bandwidth available for signal reception, and wherein controlling the display comprises

controlling the display to separately visually represent the respective bandwidths available for signal transmission and signal reception.

26. (Original) A method according to Claim 21, wherein controlling the display of the terminal further comprises representing visually the available bandwidth using a first icon corresponding to the available bandwidth.

27. (Original) A method according to Claim 21, wherein controlling the display of the terminal further comprises representing visually the available bandwidth using a first color corresponding to the available bandwidth.

28. (Previously Presented) A method according to Claim 21, wherein controlling the display of the terminal further comprises:

representing visually the available bandwidth using a first icon corresponding to the available bandwidth; and

representing visually the required bandwidth using a second icon corresponding to the required bandwidth.

29. (Previously Presented) A method according to Claim 28, wherein controlling the display of the terminal further comprises representing visually the first icon in comparative relation to the second icon.

30. (Original) A method according to Claim 29, wherein controlling the display of the terminal further comprises:

calculating a ratio of the required bandwidth to the available bandwidth; and

representing visually the second icon in a second color used to indicate a value of a ratio of the required bandwidth to the available bandwidth.

31. (Original) A method according to Claim 23, wherein controlling the display of the terminal further comprises representing visually the available bandwidth using a first icon corresponding to the available bandwidth.

32. (Previously Presented) A method according to Claim 31, wherein controlling the display of the terminal further comprises representing visually the first icon in a predefined color used to indicate the type of the current communications system on which the terminal is transmitting and receiving signals.

Claims 33-36. (Cancelled)

37. (Original) A method comprising:

transmitting and receiving signals with a first terminal on the at least one communications system;

determining an available bandwidth of the communications system utilized by the first terminal; and

controlling a display of a second terminal to visually represent the available bandwidth of the communications system utilized by the first terminal.

38. (Original) A method according to Claim 37, further comprising:

determining a required bandwidth for transmitting and receiving signals with the first terminal on the communications system; and

controlling the display of the second terminal to visually represent the required bandwidth for transmitting and receiving signals on the communications system.

39. (Original) A method according to Claim 37, further comprising:

determining a type of the current communications system on which the first terminal is transmitting and receiving signals; and

controlling the display of the second terminal to visually represent the type of the current communications system on which the first terminal is transmitting and receiving signals.

40. (Original) A method according to Claim 37, wherein separately determining the available bandwidth comprises separately determining the bandwidth available for signal transmission by the first terminal and the bandwidth available for signal reception by the first terminal, and wherein controlling the display comprises controlling the display of the second terminal to separately visually represent the respective bandwidths available to the first terminal for signal transmission and signal reception.

41. (Previously Presented) A computer program product for visually quantifying bandwidth on a terminal adapted to transmit and receive signals on at least one communications system, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

a first executable portion for determining an available bandwidth of a current communications system;

a second executable portion for controlling a display of the terminal to visually represent the available bandwidth of the current communications system;

a third executable portion for determining a required bandwidth for transmitting and receiving signals on the current communications system prior to modifying communications therewith; and

a fourth executable portion for further controlling the display of the terminal to visually represent the required bandwidth for transmitting and receiving signals on the current communications system.

42. (Cancelled)

43. (Previously Presented) A computer program product according to Claim 41, further comprising:

a fifth executable portion for determining a type of the current communications system on which the terminal is transmitting and receiving signals; and

a sixth executable portion for controlling the display to visually represent the type of the current communications system on which the terminal is transmitting and receiving signals.

44. (Cancelled)

45. (Original) A computer program product according to Claim 41, wherein said first executable portion is capable of separately determining the bandwidth available for signal transmission and the bandwidth available for signal reception, and wherein said second executable portion is capable of controlling the display to separately visually represent the respective bandwidths available for signal transmission and signal reception.

46. (Original) A computer program product according to Claim 41, wherein the second executable portion is adapted to represent visually the available bandwidth using a first icon corresponding to the available bandwidth.

47. (Original) A computer program product according to Claim 41, wherein the second executable portion is adapted to represent visually the available bandwidth using a first color corresponding to the available bandwidth.

48. (Previously Presented) A computer program product according to Claim 41, wherein the second executable portion is adapted to represent visually the available bandwidth using a first icon corresponding to the available bandwidth and wherein the fourth executable portion is adapted to represent visually the required bandwidth using a second icon corresponding to the required bandwidth.

49. (Previously Presented) A computer program product according to Claim 48, wherein the second and fourth executable portions are adapted to represent visually the first icon in comparative relation to the second icon.

50. (Previously Presented) A computer program product according to Claim 49, further comprising a seventh executable portion for calculating a ratio of the required bandwidth to the available bandwidth, and wherein the fourth executable portion is adapted to represent visually the second icon in a second color used to indicate a value of the ratio of the required bandwidth to the available bandwidth calculated by the seventh executable portion.

51. (Original) A computer program product according to Claim 43, wherein the second executable portion is adapted to represent visually the available bandwidth using a first icon corresponding to the available bandwidth.

52. (Previously Presented) A computer program product according to Claim 51, wherein the sixth executable portion is adapted to represent visually the first icon in a predefined color used to indicate the type of the current communications system on which the terminal is transmitting and receiving signals.

Claims 53-56. (Cancelled)

EVIDENCE APPENDIX

No evidence has been submitted to the Examiner or relied upon by the Applicant.

RELATED PROCEEDINGS APPENDIX

There are no decisions by a court of the Board in related proceedings.